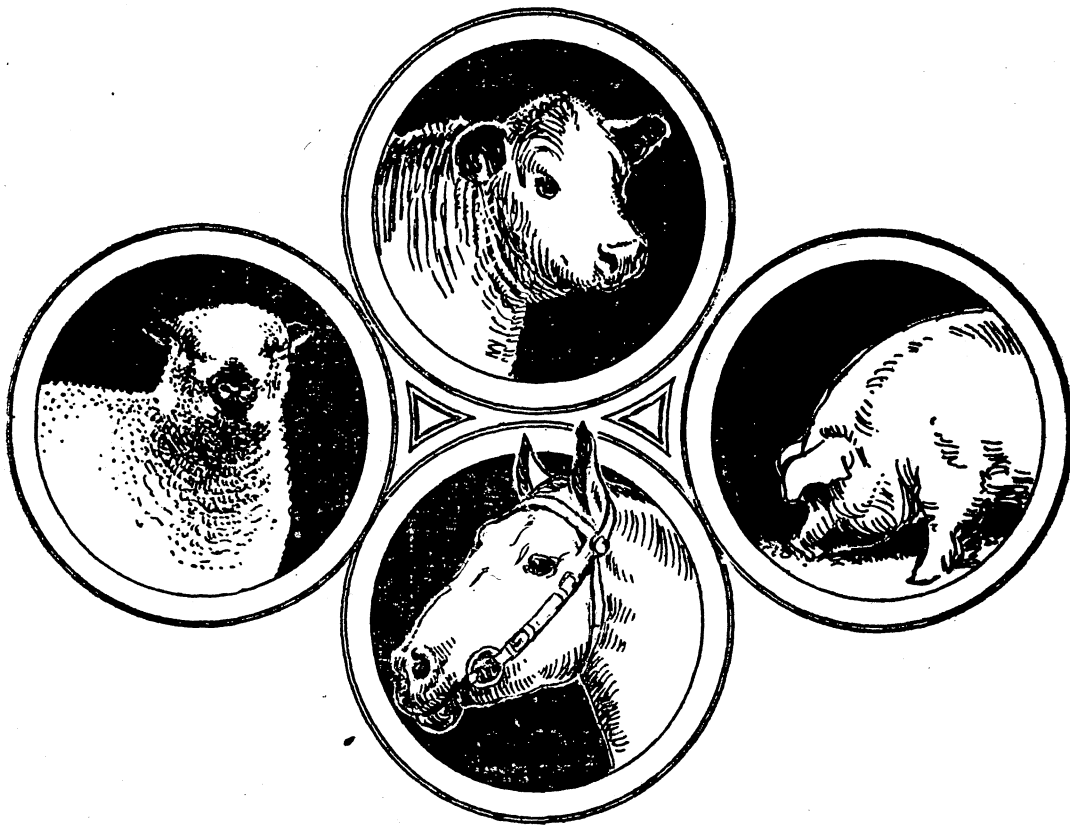


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The EXTENSION ANIMAL HUSBANDMAN



UNITED STATES DEPARTMENT
OF AGRICULTURE
WASHINGTON,
D.C.

Serial No. 5

March, 1927

THE HORSE

You tell me he lags with back numbers,
A creature of days that are past,
That his glory or record now slumbers
With things that Old Time's overcast.
I listen, and note what you're saying,
As a man does, or should do, of course,
But no word can keep me from paying
My tribute, heart deep, to the horse.

America! what pen shall reckon
The deeds of the horse in this land,
Where paths, scarcely trodden, did beckon,
Still beckon, the foot and the hand?
Through the rough Alleghenys he bore you,
Over prairies and plains with high zest,
He stood by you, toiled for you, cheered
you,
He gave to this nation the West.

So, when in a spirit of scoffing,
You take this old friend for a mark,
You'll glimpse me aside, in the offing,
Unconcerned with your whiffit-like
bark.
For though cars fill the earth with their
gases,
And airplanes the skies with their
force,
In the progress and spread of the masses,
He's immortal--God bless him!--THE
HORSE.

-- Will Chamberlain.

UNITED STATES DEPARTMENT OF AGRICULTURE

Washington, D. C.

THE EXTENSION ANIMAL HUSBANDMAN

Issued by the Bureau of Animal Industry and the
Office of Cooperative Extension Work Cooperating.

Serial Number 5 --

-- March, 1927

Is enough attention being given to the field of horse and mule production in our extension activities? This appears to be a fair question.

Statistics tell us that the value of our horses and mules aggregates \$1,401,060,000 -- a staggering total -- and that this amount is more than one-fourth the estimated value of all our livestock.

In 7 States the value of horses and mules exceeds that of all other livestock combined and in one additional State they constitute the most valuable class of farm animals.

In spite of these facts comparatively little is being done by extension workers in this field. An economy of one cent per head per day is the more efficient feeding of farm work stock would result in the saving of \$76,697,450 annually. Increasing the average quality of our horses and mules by better breeding and management practices would add much to farm resources.

Furthermore, when it is considered that work stock is found on more farms than any other class of animals, save poultry, they offer to animal husbandry specialists their best opportunity to increase the number of persons reached by their activities.

Mr. Williams's comprehensive article, which begins on the following page, has a definite application in this connection.

Don't fail to read the contributions in this issue from the State workers. Pig-crop contests, junior feeding work, meat demonstrations and community swine breeding organizations are ably presented.

The 1926 ton-litter summary is also included.

What do you want or what have you for the next number?

____ C. D. L.

OUR WORK STOCK

By John O. Williams,
In Charge, Horse and Mule Investigations,
U. S. Department of Agriculture.

The work stock, horses and mules, on American farms represent a valuation in excess of that of any other class of livestock, except when beef cattle and dairy cattle are grouped. This valuation aggregates fourteen hundred million dollars. Work stock is the one class of animals in which practically every farmer is concerned whether he is a stock farmer, cotton planter, wheat grower, or cane raiser. The situation with reference to our work stock therefore is of vital concern to all farmers. How much thought are we giving to this question?

The Work-Stock Situation

On January 1, 1927, horses on farms had decreased in numbers 3.5 per cent below the previous year. Since January 1, 1920, this decrease has been 22.5 per cent. While, during the past year, there have been indications of increased colt raising in some States this has been insufficient to meet the losses incurred in the death of old horses.

The numbers of mules have not changed so much but they have decreased in value owing to the reduced demand for them in the South because of the cotton situation. It is not likely that this demand will change materially during the present year.

The number of horses on farms January 1, 1927, was estimated as 15,279,000 and mules 5,734,000. This was a reduction of 461,000 in the number of horses as compared with the previous year. On the same date the estimated average farm price of horses was \$63.81, which was a decline in value of \$1.65 per head below that of the preceding year.

The total number of horses and mules on farms has decreased about 17 per cent since 1920, and the ratio of colts per 1,000 horses and mules has decreased from 132 in 1920 to 73 in 1925. Without colts and horses to replace our present supply of work animals the number in use will fall off rapidly. This rapid reduction will first develop into an acute shortage in those States where the horses on farms are oldest and where fewest colts are coming on as replacements. In the Northeastern and Southeastern States a larger proportion of the work animals is over 10 years of age than elsewhere.

Farmers in the Corn Belt where surplus horses have previously been raised should consider the possibility of increasing the production of the types of horses and mules that are suitable to meet the demand from the Eastern and Southern States. Only in the far Western States is the present number of colts anywhere near sufficient for replacement purposes.

That the turn in production is just around the corner is indicated in the tone of reports from some of the stallion enrollment

boards and other field agencies.

There is a definite market demand at present for high-class draft geldings and saddle horses of merit at good prices. Inferior horses of all types are a drag on the market and will undoubtedly continue so. The market is discriminating and the breeder who uses good breeding stock with a view of producing horses of a definite type and good quality, will be amply repaid for his foresight.

Shall We Continue to Use Horses and Mules on Farms?

The difficulty with the horse situation is largely psychological. Breeders of horses and mules have wondered whether there would ever be a recurrence in the demand for work stock and have been timid about resuming breeding operations. The users of horses and mules know that they are using the cheapest form of drawbar power in existence, but have wondered if some tractor or truck would soon appear which would render their present equipment obsolete or inefficient. This attitude has been nurtured and stimulated by astute and sometimes overzealous mechanical-power advocates, who have depreciated the value of horses and mules and made glowing claims for their products, which have not materialized. The farmer has consistently borne much of the burden of costly experimentation with tractors which were not adapted to his particular farm or which he should not have at all. From the information available, based on surveys made by the United States Department of Agriculture, horses and mules furnish the cheapest power for most drawbar operations on the farm.

It has been said that horses eat when they are idle and it may conversely be said that "they do not eat while they work." Other "disadvantages" of work stock are that they require time for caretaking and that they are subject to fatigue in hot weather. Some of the distinct advantages of animal power are:

1. Lower initial cost.
2. Cheaper power for tractive operations.
3. No cash outlay for feeds necessary.
4. Replacements (colts) can be raised.
5. More flexibility of power -- units can be added.
to suit the job.
6. Reserve power for emergencies.
7. More dependable.
8. Can be used in various types of soil and work
and topographies of land where tractors can not.

When these advantages of animal power are realized it is economically sound to presume that horses and mules will continue to be the principal sources of power on farms.

The problem of farm power is rather tersely stated by a director

in 8 wheat-belt banks who said "Every farmer among our patrons who went bankrupt from 1918 and 1926 could trace the cause directly to motive power." This, however, does not keep the wheat-belt farmer from buying tractors when he has a good crop. It was in the case of men who had not had good crops that the big-team hitches were looked upon most favorably, as the average successful farmer in this area seems inclined to mechanical power, if he can afford it, even though the horse power is cheaper.

Since farming is the average farmer's principal business and is to be conducted at a profit, if possible, the above example gives an insight into how some farmers get into trouble. Operating expense is the one vital factor in producing farm crops over which the farmer has control and the thinking farmer is the one who will keep down this expense at all times, rather than use mechanical power simply because he can afford it.

It is important, therefore, that farmers thoroughly study the relative advantages of animal and mechanical power for their own conditions in order to convince themselves of the necessity in planning their breeding operations for raising colts for replacement purposes before the inevitable shortage in desirable work stock occurs.

Some Problems in Horse Husbandry

It is probable that there are less dependable experimental data on horses and mules than any other class of farm livestock, despite the fact that practically every farmer in every State is vitally concerned with them. Some States have conducted very valuable work in horse feeding and breeding research, yet the possibilities for additional constructive effort are almost limitless. These problems in some instances may be regional or even more local although some of them have national scope and might be attacked from that angle.

Several of the projects under way at the present time in which the department is cooperating are here mentioned.

Feeding City Work Horses

The Bureau of Animal Industry is making a cooperative study with the Storrs (Conn.) Agricultural Experiment Station in the feeding of approximately 100 head of city work horses in daily use in that State. This work was inaugurated July 1, 1926, and is progressing in a very satisfactory manner. It is hoped especially to get some data of value pertaining to the optimum hay requirements of horses in these tests.

Breeding Light Horses under Northeastern Conditions

At the U. S. Morgan Horse Farm in Vermont a stud of about 60 pure-bred Morgans is maintained for the purpose of obtaining information on breeding, feeding, and management practices.

Raising Horses Under Range Conditions

The U. S. Range Livestock Experiment Station at Miles City, Mont., is being utilized in conducting studies on this subject. For this purpose over 100 head of animals, about half of which are draft horses and mules and the balance light horses, are being maintained. This work is in cooperation with the Montana Experiment Station.

Breeding Remount Horses

This work was started by the Bureau of Animal Industry in 1912 through the donation of two Thoroughbred stallions to the bureau by the noted horse fancier, August Belmont. The idea involved was to make available to farmers in light-horse-producing sections, the services of high-class stallions for grading up purposes and thus produce foals that might be suitable for remounts for the Army. Owing to lack of funds to meet the expansion of this project, the work was transferred to the War Department in 1920. Over 450 stallions of the Thoroughbred, Morgan, and Arabian breeds are now distributed throughout the country under this plan.

Endurance Rides

Endurance rides, sponsored by the Government and various horse organizations for the purpose of stimulating interest in the production of horses with weight-carrying qualities for long distances, have been important light-horse events during the past few years. The rides consist of 300 miles over a period of 5 days, or 60 miles a day, carrying a weight of from 200 to 245 pounds, including the rider. For a perfect speed score it is required that the day's journey be completed in 9 hours. The routes are laid out over natural roads.

Extension Work

Several States have inaugurated extension activities in horse work and report splendid progress when properly launched and supervised. These activities largely have been directed along the following lines:

- Pulling contests
- Big-hitch demonstrations
- Colt clubs

Pulling contests have had a strong appeal and proved extremely popular wherever held. Such events which usually are staged at county and State fairs serve to demonstrate the efficiency and reserve power of horses and mules and to attract the attention of farmers to better horses and better horsemanship. A special machine, known as the Collins dynamometer, is used for these tests. It measures the draft of horses as a lifting pull. The machines usually are purchased by some public agency in the State and the contests held under the auspices of the fair board and the agricultural college.

Big-Hitch Demonstrations

Big-hitch demonstrations are growing rapidly in popularity. Many

of them have been held by cooperative arrangement between the Horse Association of America and the extension services of States. Such demonstrations are proving to be a powerful factor in showing the flexibility of horses for farm work and of the ability of farmers to handle hitches of 5, 6, 8, 10 and more horses by simple equipment and one pair of lines.

Farm Shoeing

In order to overcome the disappearance of many local "smithies," by reason of which farmers in many sections have experienced difficulty in getting their work stock shod, several plans have been suggested for overcoming the problem. Perhaps the most tangible one is that which was put into practice in New York in 1925 and still in successful operation. The system used is a combination of illustrated lectures and demonstrations, given by an expert farrier in the employ of the college. The meetings are arranged by the county agent and held at a central point in the county. Horseshoers, blacksmiths, farmers and farmers' sons are invited to attend. The fundamentals of the anatomy of the foot and leg, preparation of the hoof for the shoe, and the actual shoeing are covered in simple fashion. Results have been good.

Colt Clubs

Colt clubs are making very satisfactory progress in a number of States including Pennsylvania, Indiana, and Washington. Read about the Hoosier Gold Medal Colt Club by P. T. Brown of Purdue University, in the last issue of this publication. Every youngster loves colts and any boy or girl who properly cares for a colt will learn valuable lessons, not only in animal husbandry but also in character building essentials. Don't you remember a favorite colt when you were a boy on the farm? Would you have those memories obliterated? Give the present-day boys and girls the same opportunity. The colt club points the way.

While livestock farming is a business to be carried on at a profit and animal power is a means for greater profits, there is a romantic or sentimental side to handling horses that has a strong appeal to humans of all ages. Probably next to his dog, the horse is man's best animal companion. When his useful days of work are at an end the favorite horse is pensioned with the affection and blessing of his master and turned out to green pastures and luxurious meadows to spend his declining days in peace and plenty. Have you ever heard of such affection being bestowed upon an inanimate object?

Vision without work makes a man a dreamer; work without vision makes a man a slave, but vision plus work makes the man successful, effective, empowered. -- H. G. Wells

SUMMARY OF 1926 TON-LITTER WORK BY STATES

State	Litters entered.	Litters weighing ton or more at 180 days of age.	Counties represented in entries.	Counties represented in ton litters.	Average weight of ton litters.	Average pigs in ton litters.	Weight of heaviest litter.	Pigs in heaviest litter.	Percentage of pure-bred ton litters.	Percentage of ton litters sired by purebred boars.	Feed records kept.
Alabama.....	70	6	21	4	2322	10	2615	11	--	--	Yes
Arkansas.....	25	12	18	10	2403	10	3054	13	83	100	Yes
Georgia.....	96	23	29	20	2152	9.8	3184	12	95	100	Yes
Idaho.....	53	17	14	8	2488	11	3535	15	94	94	Yes
Illinois.....	376	90	56	40	2366	11	5117	17	68	83	No
Indiana.....	264	80	65	27	2319	10.4	4925	17	53	91	No
Iowa.....	120	27	20	13	2353	11	3152	14	70	100	Yes
Kansas.....	25	4	8	3	2395	10	2542	10	100	100	Yes
Kentucky.....	175	64	27	22	2351	10.2	3321	13	54	81	Yes
Louisiana.....	16	3	10	1	2193	--	2234	9	100	100	Yes
Maryland.....	6	1	4	1	3008	12	3008	12	100	100	Yes
Michigan.....	54	23	20	14	2424	11.8	3107	14	44	83	No
Minnesota.....	208	58	50	38	2498	11.3	3966	14	38	--	Yes
Mississippi...	15	5	8	4	2200	9.4	2367	12	80	100	Yes
Missouri.....	70	29	30	18	2287	10.7	3022	13	80	100	Yes
North Carolina	19	6	--	--	--	--	2695	10	--	--	Yes
North Dakota..	30	11	26	10	2132	10.9	2336	10	82	100	Yes
Ohio.....	222	41	46	23	2303	10.4	3252	14	51	100	Yes
Oklahoma.....	60	10	20	9	2448	10.2	3105	14	100	100	Yes
Oregon.....	5	5	4	4	2459	10	2777	10	100	100	Yes
Pennsylvania..	304	114	44	33	2300	10.1	3158½	11	56	86	Yes
South Carolina	18	1	--	1	--	--	--	--	100	--	--
Tennessee.....	225	121	--	27	2472	--	3672	--	--	--	Yes
Texas.....	60	24	29	17	2377	9.8	3027	11	95	99	Yes
Utah.....	15	1	2	1	2000	8	2000	8	100	100	Yes
Virginia.....	18	4	10	4	2351	10.5	2779	11	50	100	Yes
Washington....	16	8	--	--	--	--	--	--	--	--	Yes
Wisconsin.....	69	20	29	17	2323	11.2	3095	12	84	100	No
Wyoming.....	2	0	1	--	--	--	--	--	--	--	No
	2636	808									

Tennessee with 121 ton litters takes first place this year. Pennsylvania, with 114, Illinois, with 90, Indiana, with 80, and Kentucky, with 64, are next in order. According to the data, a total of 808 official ton litters were finished, which was an increase of 41 over last year. Twenty-nine States were represented as compared to 26 in 1925. Projects involving the produce of all breeding sows on the farm, such as the Nebraska Pig Crop Contest, are gaining favor as a follow-up for ton-litter work and to a greater or less extent, may displace it, especially in the Corn Belt.

THE WISCONSIN JUNIOR LIVESTOCK SPECIALS

By H. J. Brant
Extension Specialist Swine and Beef Cattle
University of Wisconsin

For ten years the Wisconsin Live Stock Breeders' Association has supported a junior livestock exposition, held in the stock pavilion of the college of agriculture in October. In the earlier shows, dairy calves, baby beef, pigs, and lambs were exhibited. The dairy-calf show is now held at the State fair.

For the 1926 exposition, entries were restricted to steers, barrows, and wether lambs. This was done to avoid disputes over the bidding in of females to take back for breeding stock. All the animals shown must be sold at auction unless permission is granted to keep them for showing at the International.

The sponsors of this junior show had observed that too great a number of poorly finished animals were shown, thus dragging down the average price and causing marked disappointment to the youthful owners both because of their low placing and the lower price. Too often the exhibitors failed to realize the value of finish or did not know how to feed their animals to obtain it.

It was also observed that too many animals were shown by juniors who apparently had done little work with their animals, and who were receiving credit for their parents' skill and labor.

To reduce these two conditions and eventually eliminate them, the livestock-breeders' association, in cooperation with the college of agriculture, initiated in 1926 a type of feeding contest to supplement the junior livestock exposition. This was called the junior livestock special. The assistance of the 4-H boys' and girls' club organization and of the Smith-Hughes agricultural teachers was enlisted.

The contest applied to baby beef, pigs, and lambs. Calves were weighed at the farms on June first. Lambs and pigs were weighed at the farms on July first. All the animals were weighed at the show on October 27. Certificates of merit were awarded to the owner of each animal which made the standard gain per day. To take care of those boys and girls in more distant counties who were unable to ship to Madison, supervised weighing of the animal at home on the dates of the show was authorized. In that case a deduction of 5 per cent of the home weight was made. Record books on all animals were required. Gold medals were awarded to the owners of the ten highest scoring record books in each division.

The standards of daily gain were as follows:

Baby beef ----- 2 pounds
 Lamb ----- 1/3 pound
 (Under 50 pounds initial weight---- 1 pound
 Pig (Between 50 and 75 pounds initial weight 1.1 pounds
 (Over 75 pounds initial weight----- 1.2 pounds

The contest aroused great interest among the 4-H club members and the high school agricultural students. Considering the fact that Wisconsin is largely a dairy State, the entries of beef calves were quite satisfactory.

The results of the contest are shown in this table:

	: : Number of : owners :	: : Number of : animals :	: : Number : finished: :	: : Number : making : required : gain
Baby beef:	:	:	:	:
Shorthorn-----:	29	50	42	17
Hereford-----:	11	15	11	7
Aberdeen Angus--:	10	14	14	9
Total baby beef-----:	50	79	67	33
Barrows-----:	23	36	22	22
Lambs-----:	13	25	21	10

It will be noticed that slightly less than half of all the calves which were carried through to the finish made the required gain. About the same proportion of the lambs, weighed at the close of the contest, met the standard of gain. But every pig which was weighed made the required gain. This may be a result of too low a standard for the pigs or it may be because more of the boys and girls understood how to feed pigs.

The first place in the baby-beef division was won by Edward O'Connell of Roberts, with a purebred Aberdeen Angus junior calf which gained 2.776 pounds daily. This calf was also grand champion steer of the junior livestock show.

Second place went to Gordon Jewell of Mineral Point, on a purebred Hereford junior calf, gaining 2.62 pounds. Third place was won by Vernon Gochenaur, of Viola, with a purebred Shorthorn junior yearling gaining 2.601 pounds. The first ten calves averaged above 2.4 pounds daily gain for the period of about 150 days.

Of the 33 calves which exceeded the standard rate of gain, 11 were junior calves, 13 were senior calves, and 9 were junior

yearlings. Comparing these with the original number entered, we find that 44 per cent of the junior calves, 52 per cent of the senior calves and 31 per cent of the junior yearlings qualified with the standard daily gain.

Of these 33 calves we find 24 purebred, 7 grade, and 2 crossbred. The rules required that all animals entered must be sired by purebreds.

In the case of the lambs the need for better finish was especially apparent. There were only 10 lambs which made more than 1/3 pound daily gain. These were made up of 4 breeds. The first prize was awarded to Walter Templeton, on a grade Southdown lamb which had made a daily gain of 0.444 pound for a period of 117 days. Three of the qualifying lambs were purebreds and 7 were grades.

Pigs made a more nearly uniform record. The first prize went to Lorenzo Rundle, of Dodgeville on a purebred Chester White barrow gaining 1.984 pounds daily for 118 days. This was a litter mate to the grand champion barrow of the show which came third in the feeding contest. They belonged to a litter of 10 that weighed 2,350 pounds at 6 months. Four breeds of pigs were shown. Of these 22 barrows, there were 14 purebreds, 7 grades, and 1 crossbred.

The record books were scored on the following basis:

	<u>Per cent.</u>
(1) Cost of production ---	50
(2) Merit of the record --	25
(3) Care and management --	25

The owners recorded the total amounts of feeds used and in scoring the books uniform prices for the various feeds were used.

As might have been expected, very wide variations in the costs of production were found. In the case of the pigs, a large number of the records showed extremely high costs, due in part to feeding more skim milk and high-protein purchased feeds than was necessary.

The first year of this contest has shown much need of improvement in the feeding and management of farm animals. But this work has called the owner's attention to comparative gains and costs and is sure to stimulate better finishing of livestock in coming years. Although only part of the stock shown at Madison in 1926 were competing in the feeding contest, prospects point to an increased entry list for 1927.

In a State where the number of beef cattle raised does not seem to warrant a "1,000-pound calf" club or a "carlot baby-beef contest," this junior feeding contest has at least partially filled a place corresponding to the ton-litter contest.

Get happiness out of your work or you may never know what happiness is.

THE APPEAL TO WANTS

No appeal to a reason that is not also an appeal to a want is ever effective." That ought to dispose of a good deal of futile arguing. It ought to put an end to most of the angry denunciation and bitter sarcasm wherewith we infuriate each other. It ought to mend the ways of the preaching parent, the expostulating, scolding parent. It ought to indicate to the arid pedagogue a way of escape from his aridity. And finally, it ought to suggest to the earnest political reformer more effective techniques for capturing and holding that difficult but psychologically quite normal entity called "the people."

Thought (reason) is, at bottom, an instrument of action; and action, whatever it may be, springs out of what we fundamentally desire. There is, indeed, a place in life -- a most important place -- for pure thought -- thought, that is, which has no interest in immediate action. But for the most part, thought (reason) is, for us, an instrument of exploration; it enables us to see more clearly where we are going, and how we may best go. But where do we actually wish to go? If we are sure of that, then we gladly enough busy ourselves to find ideas which point the path and clear the way.

Hence, as we have seen, the arguer must first arouse in his respondent a real want to know what is being argued about, a real wish to understand, or his argumentation is only words. The trouble with most arguers is that they are too much in a hurry to unload themselves. They quite forget that, preliminary to the unloading, there must be awakened in the respondent an eagerness to want.

That perhaps is the best piece of advice which can be given to would-be persuaders, whether in business, in the home, in the school, in politics, etc.: first arouse in the other person an eager want.

He who can do this has the world with him. He who can not walks a lonely way!

-- From Overstreet's "Influencing Human Behavior."

THE NEBRASKA 1926 PIG-CROP CONTEST

By M. B. Posson, Nebraska Extension Service

In the spring of 1926 we adopted a 5-year sanitation campaign plan that is now being used in 30 counties. The various activities are outlined for a period of 5 years. This plan of doing sanitation work was based on the fact that in order to cause any new method to be adopted it is necessary to present it again and again in the same community. With this thought in mind and with a desire also to inaugurate some new activities that could be used as a sort of climax or finish-up of the 5-year campaign, we launched a contest which in the true sense of the word is nothing more than another method of getting cost-of-production results. The general plan of this contest had been worked out for 3 years but we wished to start it only after we had done sufficient sanitation work that we could present it as a supplement to that work.

We are playing up the results obtained in the Pig-Crop Contest as direct results of sanitation and we believe we are justified in doing so, for all winners this year, with one exception, followed out a very careful plan of disease prevention.

An outline of this contest as conducted last year is briefly as follows: Any farmer with 4 or more sows was eligible. All sows on the farm were to be entered before the first sow farrowed. All sows had to farrow within a period of 30 consecutive days. All pigs were to be earmarked by litters. A committee made up of two neighbors and either a county agent or a banker was to certify to these marks, etc., within 7 days after the last litter was farrowed and to sheets, numbers, etc., at the finish.

The contestant was to keep a feed record made up of weekly feed estimates. The application blank and all record blanks were placed in the hands of the contestant at the start in the form of a condensed circular. As reports came due they were torn from the circular and mailed to the State contest clerk at the agricultural college.

No cash prizes, medals, or trophies were offered. We played up the idea of the agricultural college honoring outstanding raisers of hogs. The extension service of the agricultural college presented a nicely printed document of recognition to each winner. On each document was a seal presented by the Nebraska Improved Livestock Breeders Association, the color of which signified the amount of pork raised per sow. Those who raised 1,400 pounds or more per sow received a blue seal, between 1,300 and 1,400 pounds a red seal, and between 1,200 and 1,300 a gold seal.

The documents of recognition were presented during the meetings of organized agriculture at the agricultural college. Most of the winners appraised them at a much higher value than they would have any reasonable cash prize.

The contest did not get under way until the farrowing season had practically opened. At that, 30 entries were received and 8 hog men finished. The low per cent of contestants to finish up was due to the extreme drought throughout central and southern Nebraska, which forced many men to dispose of their hogs at a young age.

Following is a table giving briefly the final results of this contest--the first of its kind ever held.

Name	Breed	sows	Pigs farrowed	Pigs raised	Average litter weight	Rations used
P.W.Christensen, Hamilton County	Duroc	15	112	100	1333	Corn, oats, tankage, rye, red-clover pasture.
Clifford Eshelman, Webster County	Duroc	16	142	129	1681	Corn, oats, tankage, skim milk, oil meal; clover, Sudan, and alfalfa pasture.
R. C. Johnson, Saunders County	Poland	10	73	68	1437	Corn, oats, tankage, some skim milk and oatmeal; blue-grass pasture.
B. S. Miller, Polk County	Duroc	16	145	104	1287	Corn, oats, tankage, an old mule; alfalfa and clover pasture.
Ernest Schmidt, Dodge County	Spotted Poland	11	88	68	1296	Corn, oats, tankage, buttermilk, barley; clover, rye, and Sudan pasture.
John Stahly, Seward County	Duroc	7	56	51	1545	Corn, oats, tankage, buttermilk, some pig meal; alfalfa pasture.
M. G. Strobe, Antelope County	Duroc	21	154	145	1208	Corn, tankage, pig meal (3 kinds), alfalfa, and Sudan pasture.
Wm. Zoeller, Jr., Richardson Co.	Poland	4	31	31	1697	Corn, skim milk, pig meal (to young pigs only), alfalfa pasture.

Average feed and labor cost per cwt. of all pork produced....	\$ 5.70
Average weight of all pigs raised at 6 months of age.....	198
Average weight of all litters produced.....	1382
Average number of sows per farm	12.5
Average number of pigs farrowed per sow.....	8
Average number of pigs raised per sow.....	6.9
Average percentage of farrowed pigs raised.....	87

The Snare of Big Words

(A Poem With a Moral for All Public Speakers)

He was a lover of words, of great, fat words,
 Opulent rubious rutilant words of Rome,
 Sea-whitened words of Mediterranean cities,
 And square black words upturned in Saxon loam.

He knew a million words; vast Eastern verbs
 Now stripped, despoiled, in Western streets athirst,
 And porcelain words made for an elegant lady,
 And ultimate words wherewith God has been cursed.

He always had his pockets full of words
 To show to his friends; pluck-buffet, cul-de-sac,
 Down-gyve, swinge-buckler, madspur, psychropote,
 Mumpsimus, whidder, flittermouse, flapjack.

With all his words, when Fate came swooping near,
 And paused and spoke and lingered at his side,
 He could not find those common little words
 That might have made him happy till he died.

-- Morris Bishop.

OHIO MEAT-DEMONSTRATION TRAIN

By Paul Gerlaugh, Ohio Extension Service

A meat demonstration train was run by the Ohio State University over the Pennsylvania Railroad in southwestern Ohio during November, 1926. Its purpose was to reach housewives with information relative to identity and uses of various retail cuts of beef, the known factors which indicate quality and fundamentals in cooking meats.

Retail prices of beef do not represent actual values so much as they reflect consumer demand. This demand is due principally to the fact that too few housewives know about these less popular cuts of beef. Here is an excellent opportunity for housewives to economize in their meat expenditures without compromising the quality of the meals they serve. Then butchers would have less need for cattle that are all ribs and loins.

Many complaints are made about beef being tough. The average person thinks that tough beef comes only from old cows. An attempt was made in these demonstrations to show that fat was the most important factor in making tender, palatable beef. If people will insist on beef which carries sufficient fat to do the lean justice, that demand will go a long way toward creating a better market for well-fattened cattle and in that way help the producer of livestock.

Preparation of meats was discussed by representatives of the Home Economics Department of Ohio State University and the National Live Stock and Meat Board.

County seat towns were visited in the itinerary. A day was given to each stop. Posters and notices of the train were sent out by the county agents and invitations were distributed by meat dealers. During the forenoon the Home Economics and Agricultural classes of the high schools, both urban and rural, were invited to attend. The afternoon and evening were given over to housewives.

Arrangements were made in advance with retailers to furnish a side of beef and some one to do the cutting. As the side was being cut an explanation was made of the name, identity, approximate cost, and use of the piece.

The importance of fat, age, and color in beef as it relates to quality was stressed at this demonstration. A baggage car was equipped with refrigerated display counters. In these counters were placed different wholesale cuts of beef and pork. Two or three different grades of these cuts were shown for comparison.

Another baggage car was equipped with stalls and pens. Different market grades of cattle, sheep, and hogs were shown so that people could acquaint themselves with the appearance of the animal which produces each grade of meat they had seen in the other car. Many of these housewives had never realized that animals are sometimes slaughtered for beef before they are properly fattened. Lean beef will probably make less appeal to them when they again see it in the meat market.

The end seats were taken out of two coaches and a platform built in. A meat-cutting table was placed on the platform. These cars were used for the demonstrations in cutting beef and the lectures and demonstrations by the home economics specialists.

The results of the project were quite pleasing. An average daily attendance of over 900 was obtained. Housewives in most cases know comparatively little about the various cuts of meat and the factors that influence quality, but they are interested in learning. Butchers have told us that they have been able to notice a difference in the attitude of purchasers of meats, following such a demonstration.

Russell G. East, Agricultural Agent of the Pennsylvania Railroad, A. T. Edinger of the United States Department of Agriculture, and Miss Inez Willson, of the National Live Stock and Meat Board assisted university representatives in making the project a success.

Personal Notes

E. W. Lawson, who had served as sheep specialist in the Virginia Extension Service for the last 3 years, died early in January, following a major operation. His successor has not been named.

J. G. Liddell, who for several years has been swine specialist in Georgia, resigned on January 1 to accept a position as agricultural agent for the Central of Georgia Railway. Gladstone Owens, a Georgia county agricultural agent, was appointed to fill the vacancy.

Send It In

If you have a bit of news,
Send it in,

Or a joke that will amuse,
Send it in,

A story that is true,
We want to hear from you--
Send it in.

Never mind about the style,
If the news is worth while,
It may help or cause a smile,
Send it in.

PENNSYLVANIA'S COMMUNITY SWINE-BREEDING PLAN

By H. H. Havner,
In Charge of Animal Husbandry Extension,
The Pennsylvania State College.

Statistics Tell Interesting Story:

Figures from the 1925 Triennial Census for Pennsylvania tell an interesting story of swine raising. The total swine population of Pennsylvania is given as 782,219 and the number of breeding sows as 87,167. Rather significant, however, is the number of farms keeping sows and gilts for breeding purposes. In 1920 a total of 73,702 farmers owned 143,239 sows and gilts and in 1925 less than 60,000 farms were credited with the ownership of 87,167 sows and gilts used for breeding purposes. This was an average of two brood sows per farm in 1920 and for the year 1925 considerably less than a two-sow average. The fundamental fact in this connection is that a large number of Pennsylvania farmers keep only 1 to 2 brood sows and that few are extensive hog raisers to the extent of keeping 25, 50, or 75 brood sows. With this marked contrast in size of unit as compared with the Corn Belt, it can be readily understood that a swine-breeding improvement program to be effective must be organized on a somewhat different basis than would prevail in the Middle West. Thus the community idea in pork production was conceived, and for the purpose of making most effective the improvement of the swine stock of the State, the community instead of the individual farm functions as the working unit.

The Boar Association Offers a Solution:

An average of 1 to 2 brood sows per farm is too small a unit to make it profitable to maintain a herd boar on each farm. Cost-account records show that the expense of keeping a mature hog on the farm for a year varies from \$50 to \$70, depending on yearly feed costs. Where two sows are kept, even if they raise two litters a year, the service fee per litter would run from \$12.50 to \$15, which is quite high for litters that are being raised for their pork value.

To reduce this necessary overhead expense, boar associations have been organized. These associations make it possible for a group of farmers in a community to purchase and keep a boar cooperatively at very little cost per member. The original cost of the boar divided among the members makes it possible for them to get a much better sire than would be practicable for any one of the individual members to own. The boars owned by the associations in the State are of very high standard and a number of them have been prize winners at some of the best swine shows in the country.

The success of these associations is indicated by the improvement in the quality of the stock in the communities and the low cost for breeding service. Probably the most successful association from a financial standpoint is the one at Shannondale, Clarion County,

which has been in operation for 6 years. The original cost per member was \$11. They have their third boar at the present time with a balance of nearly \$100 in the association treasury. All the members have bred their sows to the association boars during this time without any cost for keep. The boars have been maintained by service fees for sows not owned by association members.

Plan In Operation Eight Years:

The first community boar association was organized in Pennsylvania in 1918 and from that time the project has enjoyed a rather broad expansion. Of course there has been some fluctuation in number of units along with the hog cycle. Nevertheless there has been a permanency to the project, regardless of pork prices. The high point in number of organizations occurred in 1923 when there were 105 boar associations with a total membership of 1,097 farmers. With the partial collapse of the hog market during this period the number of associations fell off somewhat but never dropped below the fifty mark at any time. Six new associations were organized during the last year (1926). Each association has a constitution and by-laws and each organization holds meetings at least twice a year and in several associations as frequently as once a month except during the summer. Timely discussions on feeding and management are a part of the program for these meetings. The swine extension specialist and the county agent attend these meetings at frequent intervals and discuss different phases of profitable pork production.

Number of Ton Litters Significant:

Though not a specialized pork producing section as compared to any of the Corn Belt States, the number of ton litters produced in Pennsylvania may be taken partly as an indication of the effectiveness of the community boar association. Farmers who are members of these associations testify in no uncertain terms to the importance of the community boar association in the final ton-litter results for the State. It seems to be the prevailing opinion among the farmers themselves that the community boar associations now operating in some twenty counties of the State had a very direct bearing on the total of 121 ton litters for 1925, and the 114 litters that made a ton or better in 1926.

"There is no limit to the amount of good a man can do, if he doesn't care who gets the credit."

"He who will not reason is a bigot; he who can not is a fool, and he who dares not is a slave."

A FEW RECENT STATE BULLETINS

Ram Selection and Ewe Culling by L. A. Kauffman -- Ohio Extension Service Bulletin No. 51.

Lamb Feeding Investigations, 1925-26 by Reed and Marston -- Kansas Experiment Station Circular No. 131.

Lamb Feeding Experiments by Hickman and Rinehart -- Idaho Experiment Station Circular No. 40.

Growing Healthy Hogs -- Iowa Extension Service Bulletin No. 133.

Wyoming Corn for Pork by W. L. Quayle -- Wyoming Experiment Station Bulletin No. 148.

Protein Supplements to Corn in Dry Lot for Fattening Pigs by Godbey and Durant -- South Carolina Experiment Station Bulletin No. 234.

Crossbreds versus Purebreds in Producing Market Hogs by John M. Evvard and others -- Iowa Experiment Station Leaflet No. 20.

Protein Supplements, Mineral Mixtures, Outdoor Sunshine and Water Supply for Fall Pigs by John M. Evvard and others -- Iowa Experiment Station Leaflet No. 17.

Corn Gluten Feed, Enzymes, Oat Feed, Minerals and Water Supply for Fattening Spring Pigs by John M. Evvard and others -- Iowa Experiment Station Leaflet No. 18.

Corn Belt Rations for Fattening Spring Pigs on Pasture and in Dry Lot by John M. Evvard and others -- Iowa Experiment Station Leaflet No. 19.

Range and Ranch Studies in Wyoming by A. F. Vass -- Wyoming Experiment Station Bulletin No. 147.

The Baby Beef Club by Carlock and Martin -- Missouri Extension service Boys' and Girls' 4-H Club Circular No. 21.

Wintering Stock Steers by Potter and Withycombe -- Oregon Experiment Station Bulletin No. 224.

Cattle Feeding Investigations, 1925-26 by Anderson and Marston -- Kansas Experiment Station Circular No. 130.

Results of the First Annual Minnesota Carload Baby Beef Contest by A. A. Dowell -- Minnesota Extension Service Publication (No number).

STAKING OUT SHADOWS

We must keep our minds and our methods elastic if they are to be effective.

In his Lay Morals, Robert Louis Stevenson suggests the picture of a nimble and exact man who sets out with cords and pegs to stake out the shadow of a great oak, confident that when he has driven his pegs and stretched his cords, the shadow will stay within roped-off area.

But the intricate tracery on the sun-and-shadow carpet beneath the oak is a shifting and shimmering design played with by wind and march of sun. "At every gust," says Stevensen, "the whole carpet leaps and becomes new."

Shadows laugh at boundaries.

And yet we spend untold energy in the bootless business of staking out shadows.

We are staking out shadows when we think we can carry on a changing job with a changeless mind.

When the work grows faster than the worker grows, the shadow is escaping its boundary.

We are staking out shadows when we draw up a creed and dare the world to outgrow it.

A creed is a snapshot of the world's mind and heart at some given moment; the history of creeds is thus a sort of family album of our spirits.

The growth of mind and spirit can be caught only by a moving picture.

When at any given moment we see farther than we have said in our creeds, the shadow has escaped its boundary.

We are staking out shadows when we expect education to give us a set of stock ideas on which we can do business for the rest of our lives.

Propagandists teach us how to make up our minds.

Educators teach us how to change our minds.

When life sets us a problem we can not find in our college notebooks, the shadow has escaped its boundary.

The future belongs to the mind that dares to be tentative.

The development of truthfulness is more important than the discovery of any single truth.

We must grow with our jobs or give up our jobs.

We must keep our creeds as starting points rather than goals.

We must not waste our time staking out shadows.

But regardless of what we do, life will grow; morals will change until the hero of one generation will be the highwayman of the next; science will march with seven-league boots until the heresies of yesterday will be the superstitions of tomorrow.

Life, like shadows, laughs at boundaries.

-- Glenn Frank.

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